SIEMENS

ARCADIS Avantic

SP

Startup

System

Laser Light Localizer Generator

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Safety information

NOTICE

Laser

➪ **This product contains two class 2 lasers. (USA: class 2 laser) Follow the safety instructions of ARTD-002.731.03... When working with the laser light localizer, do no look directly into the laser beam.**

NOTE

The eye is not in immediate danger. However, it is important not to look directly into the beam.

Other notes

These adjustment instructions apply only to the installation of a laser light localizer in an ARCADIS Avantic.

This document also provides adjustment instructions for service and maintenance. Store it in a safe location together with the adjustment device.

NOTICE

Boards

➪ **Switch off ARCADIS Avantic prior to disconnecting and connecting boards**

Protective conductor resistance test

After all work has been completed and all covers have been installed, perform the protective conductor test according to ARTD-002.731.17... The protective conductor resistance may not exceed 0.2 Ohms.

Required measuring equipment and aids

(according to SPC, Spare Parts Catalog, under Tools)

- Tool kit
- Protective conductor meter, item no. 44 14 899 RV090

Start-up

- Switch on the ARCADIS Avantic. The laser light localizer automatically shuts off after 5 minutes.
- Switch on the laser light localizer via the - on the ARCADIS Avantic operating console - pushbutton.
- Position the C-arm in the preferred position for operation, i.e. horizontally with the C-arm lowered.

Adjusting the laser light fan beams to the I.I. grid

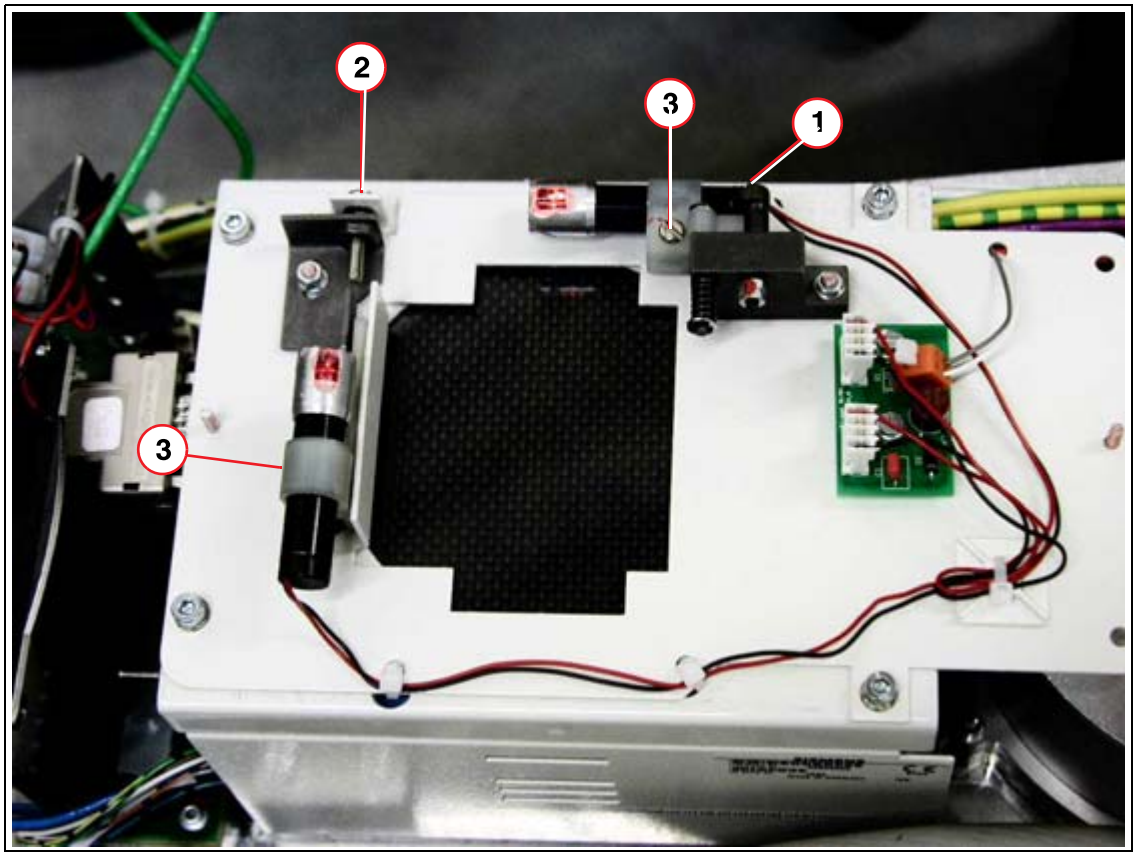

Fig. 1: Laser_unit

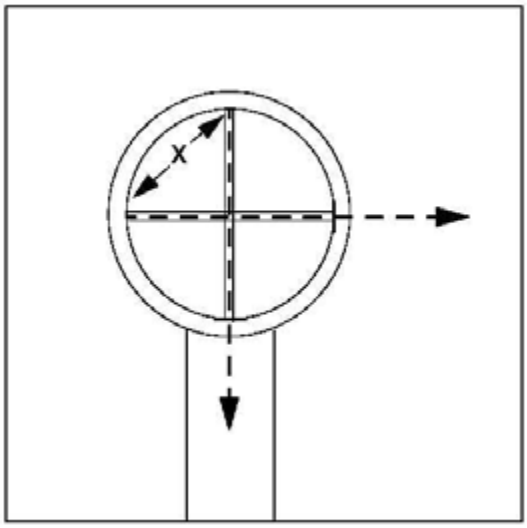

Fig. 2: Laser light fan beams

- Move the excenter (1 und 2/Fig. 1 / p. 9) to the "zero position".
- Loosen the screws (3/Fig. 1 / p. 9) until the laser diodes can be turned in their holders.

NOTICE

Important!

➪ **Do not turn the lens of the laser diodes.**

- Turn the diodes in the holder until the laser light fan beams are reflected on the I.I. as shown in (Fig. 2 / p. 9). The laser light fan beams begin at (X/Fig. 2 / p. 9). This setting ensures that the laser light fan beams cross near the laser light localizer.
- Retighten the screws (3/Fig. 1 / p. 9).

Checking the laser light beam at the image intensifier

This check is to be performed according to (1 und 2/Fig. 3 / p. 11).

The laser beam must cross the center of the fastening screws.

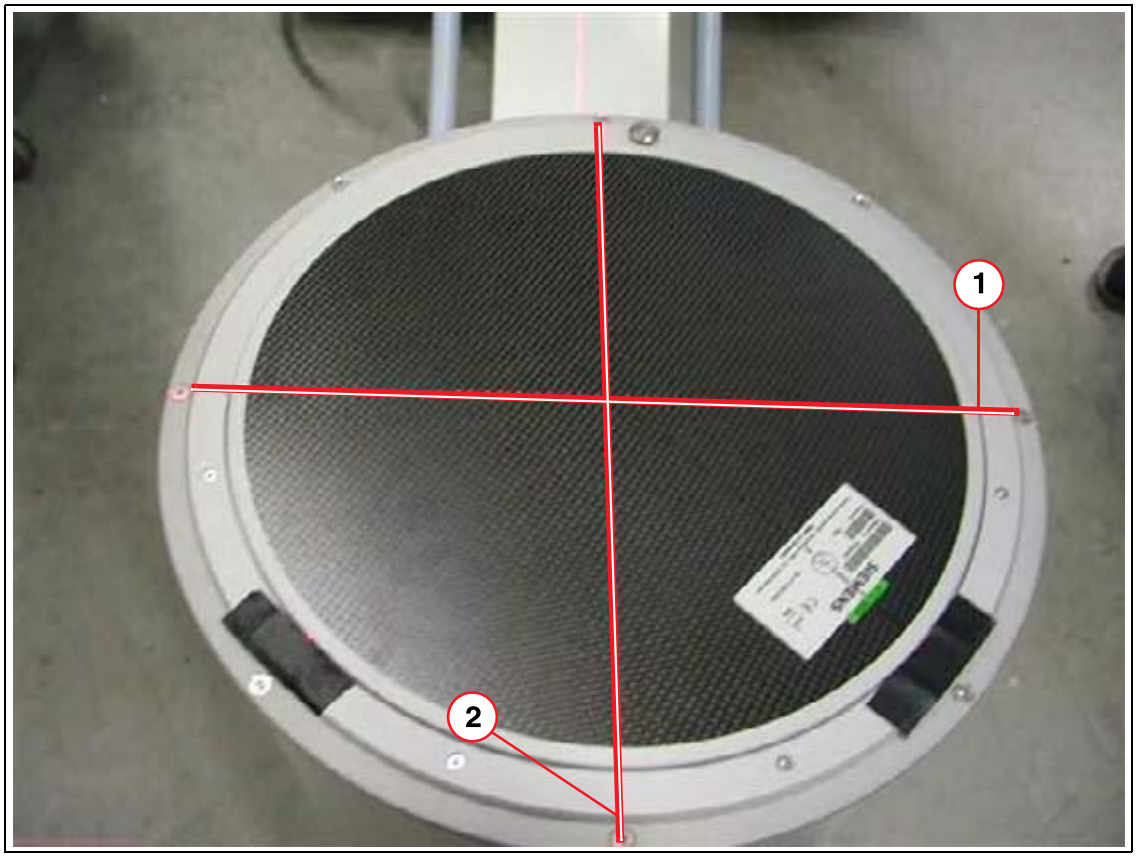

Fig. 3: Laser light_I.I.

Final steps and functional test

- Mount the POWERPHOS cover and secure it via the cover screws.
- Store these adjustment instructions in register 4, "Start-up" of the ARCADIS Avantic system folder. These adjustment instructions can be used for adjustment procedures during subsequent service and maintenance work.
- Switch on the laser light localizer. The two lasers must shut off automatically after 5 minutes.
- Perform the protective conductor test for the entire ARCADIS Avantic system.

Checking the identification labels

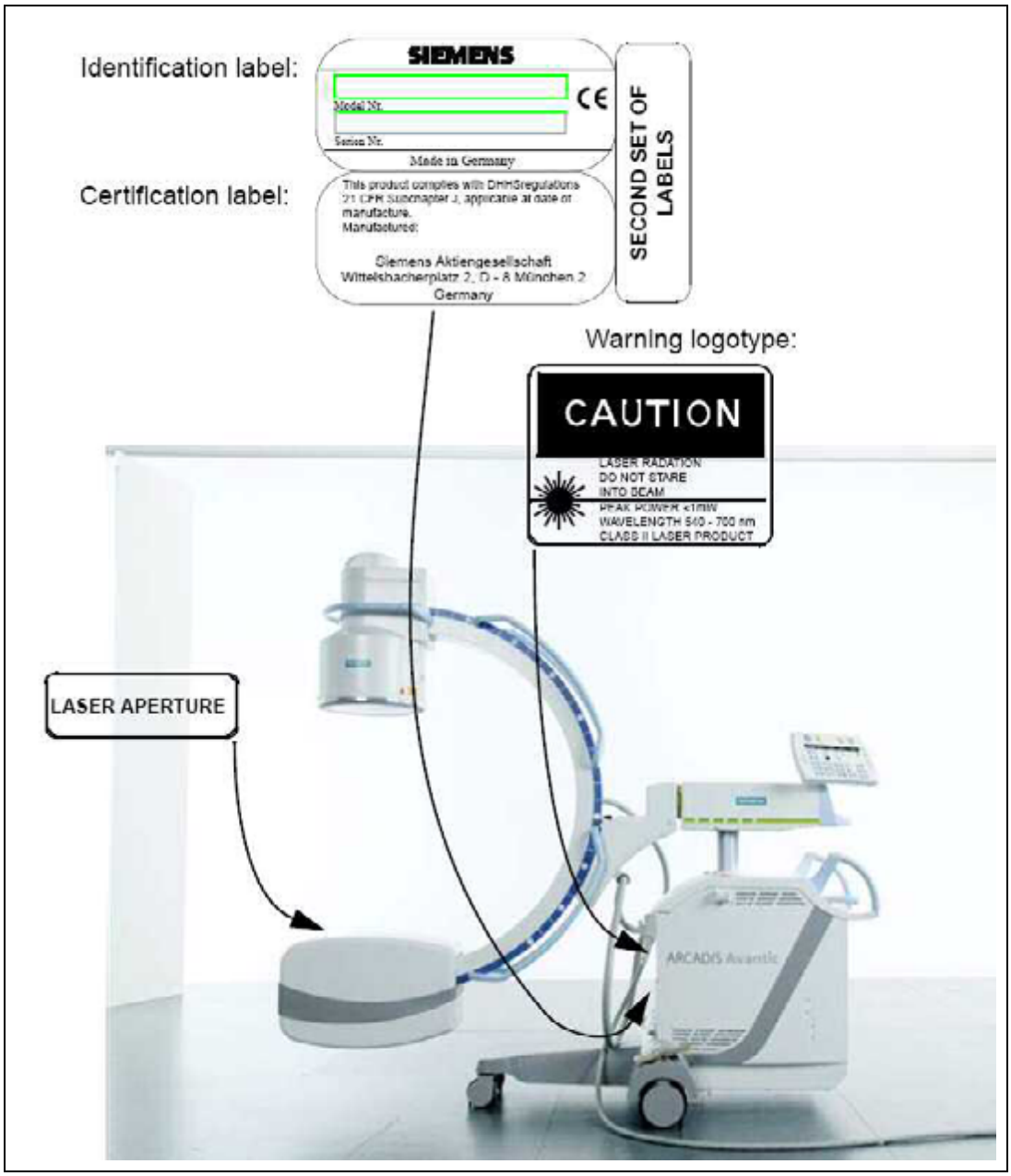

Fig. 4: Stickers_other_countries

Labels for the U.S.A.

- Visually inspect the identification labels, warning logo type "Laser class 2", DHHS certification label, and the laser aperture label as in (Fig. 4 / p. 13) and (Fig. 5 / p. 14).

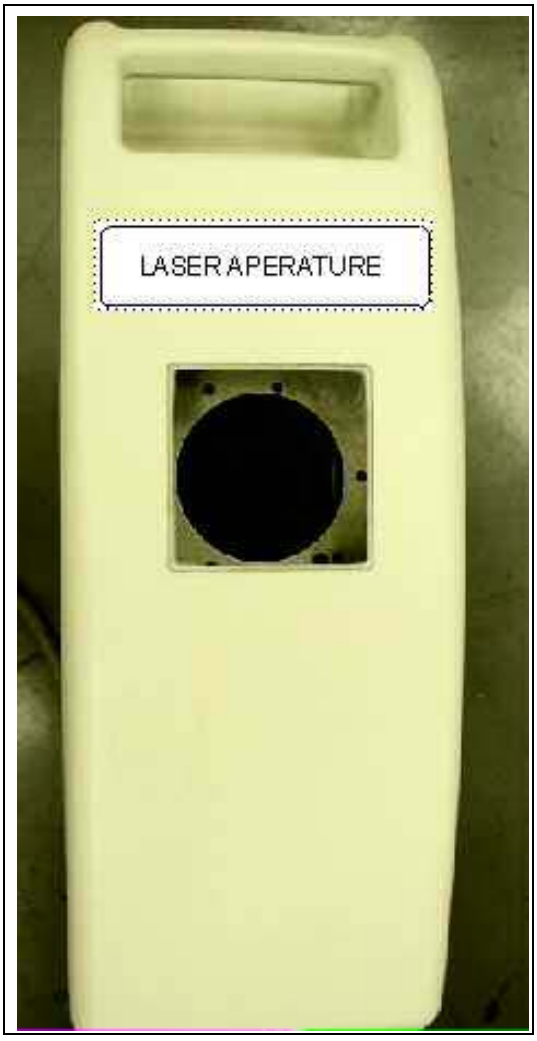

Fig. 5: Sticker_laser aperture

Warning label check

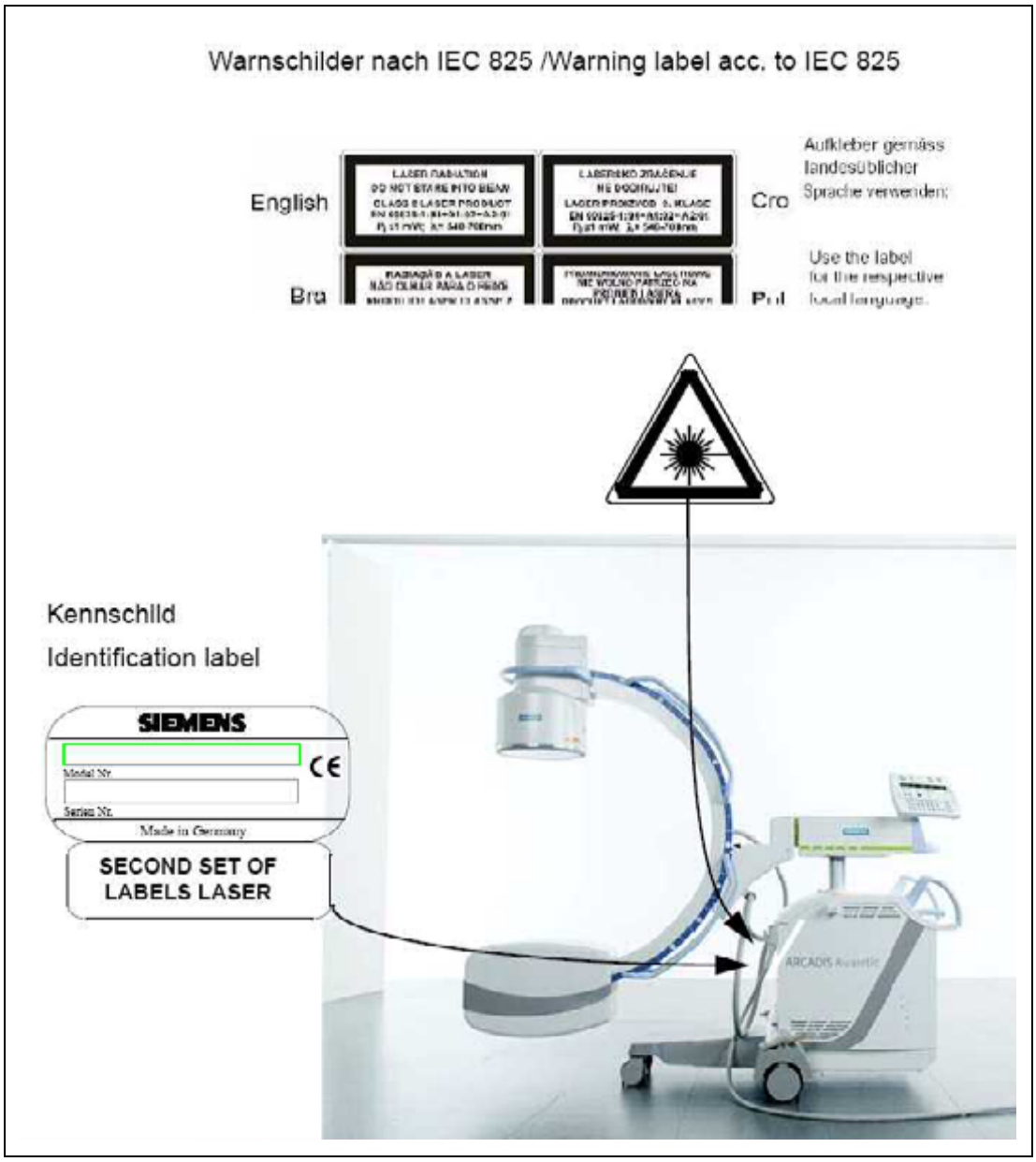

Fig. 6: Label_not_usa

- Check the warning label according to (Fig. 6 / p. 15).

Other countries: Check the warning label according to IEC 825 (text) in the local language, the warning label according to IEC 825 (symbol) and the identification label.

Great Britain: Check the warning label according to IEC 825 (text) in the local language, the warning label according to IEC 825 (symbol) and the identification label. Also check the laser aperture labels (Fig. 5 / p. 14).

Maintenance

Mechanical safety

- Ensure that the laser light localizer is labeled as described in this document. Replace any labels that are damaged.
- Check the I.I. ring as well as the removable grid for mechanical damage.
- Check the laser beam exit window at the tube cover for damage.
- Ensure that the laser light fan beams are set as described in this document.

Operating value inspection

- Check the function of the "Laser light localizer on/off" button on the operating console of the basic unit.
- Switch the laser light localizer back on.
  - ➪ The laser diodes must shut off automatically after 5 minutes.

Changes to Previous Version 17

No changes; initial publication.